(51) International Patent Classification [6] : **C03B 37/02, 37/025, 37/07**	**A1**	**(11) International Publication Number:** **WO 99/15470** **(43) International Publication Date:** 1 April 1999 (01.04.99)

(71) Applicant *(for all designated States except US)*: CORNING INCORPORATED [US/US]; 1 Riverfront Plaza, Corning, NY 14831 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: ALLEN, Martin, W. [US/US]; 3214 Graylyn Terrace, Wilmington, NC 28405 (US). HASKINS, Lori, L. [US/US]; 702 Owens Court, Wilmington, NC 28412 (US). RUGER, Lisa, M. [US/US]; 7104 Robmar Court, Wilmington, NC 28405 (US).

(74) Agent: HERZFELD, Alexander, R.; Patent Dept., SP FR 02-12, Corning Incorporated, Corning, NY 14831 (US).

(54) Title: DRAW CONSTANT DOWNFEED PROCESS

(57) Abstract

Optical fiber (14) is drawn from a preform (10) that is fed to a furnace at a constant downfeed rate. The optical fiber (14) is drawn by a tractor (20) at a rate of at least 10 meters per second and the tractor (20) is allowed to vary the draw speed of the fiber (14) based on the fiber diameter as measured by a diameter monitor (15) during the draw processing in order to maintain a relatively constant fiber diameter. Maintaining the preform downfeed rate constant even at high draw rates in excess of 20 meters per second does not adversely effect the draw process and is believed to reduce or eliminate oscillations in the draw control loop that can cause variations in the core shape during fiber formation, resulting in reduced PMD and improved MFD uniformity.